



PTO/SB/08B (Modified)

<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>		
		Application Number	09/009,455	
		Filing Date	01/20/1999	
		First Named Inventor	Mills	
		Group Art Unit	1754	
		Examiner Name	Tsang	
Sheet	1	12	Attorney Docket Number	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, Vol. 16, No. 4, December, (2003), pp. 433-498. (Web Publication Date: May 23, 2002.)	
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Materials Science, in press. (Web Publication Date: May 3, 2002.)	
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in Resonance Transfer Plasmas," J. Appl. Phys., Vol. 96, No. 6, (2004) 3095-3102. (Web Publication Date: June 16, 2003.)	
	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (Web Publication Date: Jan. 27, 2003.)	
	81	R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jansson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal: Applied Physics, 28, (2004), 83-104. (Web Publication Date: Feb. 21, 2003.)	
	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77-90. (Web Publication Date: Dec. 22, 2003.)	
	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, in press. (Web Publication Date: Aug. 6, 2003.)	
	96	J. J. Phillips, C. K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B: Atomic Spectroscopy, submitted. (Web Publication Date: Sept. 12, 2003.)	
	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (Web Publication Date: Sept. 26, 2003.)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (Web Publication Date: Nov. 18, 2003.)	

Examiner Signature	<i>Amy Lee Foster</i>	Date Considered	8/28/2005
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	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (Web Publication Date: Nov. 17, 2003.)	
	101	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Chemistry of Solid, Liquid, and Gaseous Fuels, 227th American Chemical Society National Meeting, March 28-April 1, 2004, Anaheim, CA.	
	102	R. L. Mills, "Exact Classical Quantum Mechanical Solutions for One- through Twenty-Electron Atoms," Phys. Essays, submitted. (Web Publication Date: April 22, 2004.)	
	103	R. L. Mills, Dhandapani, W. Good, J. He, "New States of Hydrogen Isolated from K <sub>2</sub> CO <sub>3</sub> Electrolysis Gases," Electrochim. Acta, submitted. (Web Publication Date: April 28, 2004.)	
	104	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22-26, 2004, Philadelphia, PA.	
	113	R. Mills, "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States", New Journal of Physics, submitted.	
	114	R. Mills, K. Akhtar, B. Dhandapani, "Tests of Features of Field-Acceleration Models for the Extraordinary Selective H Balmer $\alpha$ Broadening in Certain Hydrogen Mixed Plasmas," Journal of Applied Physics, submitted. (web publication June 24, 2005, www.blacklightpower.com).	

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	105	J. Phillips, C. K. Chen, R. L. Mills, "Evidence of Catalytic Production of Hot Hydrogen in RF-Generated Hydrogen/Argon Plasmas," J. Appl. Physics, submitted. (Web Publication Date: September 7, 2004.)	
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (Web Publication Date: October 28, 2004.)	
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fast and Which is Fiction," Physica Scripta, submitted. (Web Publication Date: October 28, 2004.)	
	108	R. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Issues (IJGEI). Special Edition in Energy System, submitted. (Web Publication Date: April 4, 2005.)	
	109	R. L. Mills, M. Nansteel, J. He, B. Dhandapani, "Low-Voltage EUV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (Web Publication Date: April 15, 2005.)	
	110	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap. — Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (Web Publication Date: April 22, 2005.)	
	111	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrogen Species H <sup>+</sup> (1/4) and H <sub>2</sub> (1/4) as a New Power Source," Thermochimica Acta, submitted. (Web Publication Date: May 6, 2005.)	
	112	R. L. Mills, J. He, Y. Lu, Z. M. Nansteel, Chang, B. Dhandapani, "Comprehensive Identification and Potential Applications of New States of Hydrogen," Central European Journal of Physics, submitted. (Web Publication Date: May 9, 2005.)	

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Sheet	4	of	12	Attorney Docket Number	9113-20US

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		CRITCHLEY <i>et al.</i> , "Energy shifts and forbidden transitions in H <sub>2</sub> due to electronic g/u symmetry breaking", <i>Molecular Physics</i> , 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd.	
		GAMBUS <i>et al.</i> , "Spectroscopic Study of Low-Pressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", <i>Energy &amp; Fuels</i> , 2002, 16, pp. 172-176, American Chemical Society	
		CVETANOVIC <i>et al.</i> , "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", <i>Journal of Applied Physics</i> , 97, 033302 (2005), American Institute of Physics	
		AKATSUKA <i>et al.</i> , "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", <i>Physical Review E</i> , 49, 2, pp. 1534-1544, February, 1994, The American Physical Society	
		MURAKAMI <i>et al.</i> , "Chemisorption of hydrogen into a graphite-potassium intercalation compound C <sub>8</sub> K studied by means of positron annihilation", <i>J. Chem. Phys.</i> , 62 (10), May 15, 1995, American Institute of Physics	
		AHN, "Hydrogen Storage in Metal-Modified Single-Walled Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001	
		DUAN <i>et al.</i> , "Numerical calculation of energies of some excited states in a helium atom", <i>Eur. Phys. J.</i> , B 19, (2002), pp. 8-12, Societa Italiana di Fisica, Springer-Verlag 2002	
		NIXON <i>et al.</i> , "Formation and structure of the potassium graphites", <i>Brit. J. Appl. Phys.</i> , Ser. 2, Vol., 1, pp. 291-299, Great Britain, 2002	
		ZELLINGER, "Experiment and the foundations of quantum physics", <i>Reviews of Modern Physics</i> , Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society	

Examiner Signature	<i>Awaj Isay Foster</i>	Date Considered	8/28/2005
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		COTTON <i>et al.</i> , "Complexes of Cyclic 2-Oxacarbenes. I. A Spontaneous Cyclization to Form a Complex of 2-Oxacyclopentylidene", <i>Journal of the American Chemical Society</i> , 93:11, pp. 2672-2676, June 2, 1971	
		LINDSAY <i>et al.</i> , "A remeasurement of the 2.4 $\mu$ m spectrum of J = H <sub>2</sub> pairs in a parahydrogen crystal", <i>Journal of Molecular Spectroscopy</i> , 218, Pp. 131-133, 2003	
		JUAREZ <i>et al.</i> , "Photoelectron angular distributions of rotationally resolved states in para-H <sub>2</sub> <sup>+</sup> : A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5	
		WEISSTEIN, "Ortho-Para Hydrogen", <a href="http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html">http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html</a>	
		SMITH, "Infrared spectra of BO <sub>2</sub> <sup>-</sup> in the alkali halides-L. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , Vol. 30A, pp. 875-882, Pergamon Press, 1974	
		LEITCH <i>et al.</i> , "Raman Spectroscopy of Hydrogen Molecules in Crystalline Silicon", <i>Physical Review Letters</i> , 81:2, pp. 421-424, July 13, 1998, The American Physical Society	
		CHEN <i>et al.</i> , "Key to Understanding Interstitial H <sub>2</sub> in Si", <i>Physical Review Letters</i> , 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society	
		CHEN <i>et al.</i> , "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H <sub>2</sub> and Para-D <sub>2</sub> ", <i>Physical Review Letters</i> , 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society	
		LAVROV <i>et al.</i> , "Ortho and Para Interstitial H <sub>2</sub> in Silicon", <i>Physical Review Letters</i> , 89:21, pp. 215501-1 - 215501-4, November 18, 2002, The American Physical Society	
		STAVOLA <i>et al.</i> , "Interstitial H <sub>2</sub> in Si: are all problems solved?", <i>Physica B</i> , pp. 58-66, 2005 Elsevier B.V.	

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		MILLS et al., "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source", pp. 1-8, BlackLight Power, Inc.	
		DECIUS et al., "Force Constants of the Metaborate Ion in Alkali Halides", <i>The Journal of Chemical Physics</i> , 56:10, pp. 5189-5190, May 18, 1972	
		"Infrared spectra of the metaborate ion in alkali halide solid solution", <i>Research Notes</i> , pp. 600-602	
		SMITH, "Anharmonic force field of the metaborate ion in alkali halides", <i>The Journal of Chemical physics</i> , 58:11, pp. 4776-4778, June 1, 1973	
		HISATSUNE et al., "Infrared Spectra of Metaborate Monomer and Trimer Ions", <i>Inorganic Chemistry</i> , pp. 168-174	
		JONES et al., "Force Constants of Nickel Carbonyl from Vibrational Spectra of Isotopic Species", <i>The Journal of Chemical Physics</i> , 48:6, pp. 2663-2670, March 15, 1968	
		SMITH, "Infrared spectra of BO <sub>3</sub> in the alkali halides-I. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , 30A, pp. 875-882, 1974, Pergamon Press	
		SCHOENFELDER et al., "Kinetics of Thermal Decomposition of TiH <sub>2</sub> ", <i>J. Vac. Sci. Technol.</i> , 10:5, pp. 862-870, Sept./Oct. 1973	
		"Emission Characteristics for Scandium Type Dispenser Cathodes", HeatWave Labs, Inc., TB-119, May 24, 2001, Spectra-Mat, Inc.	
		"Emission Characteristics of 'M-Type' Dispenser Cathodes", HeatWave Labs, Inc., TB-117, May 24, 2001, Spectra-Mat, Inc.	
		"Practical Aspects of Modern Dispenser Cathodes", <i>Microwave Journal</i> , September, 1979	

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		"Standard Series Barium Tungsten Dispenser Cathodes", HeatWave Labs, Inc., TB 198, July 29, 2002, Spectra-Mat, Inc.	
		ABATE <i>et al.</i> , "Optimization and enhancement of H $\alpha$ lines in a magnetized sheet plasma", <i>Review of Scientific Instruments</i> , 71:10, pp. 3689-3695, October 2000, American Institute of Physics	
		CHABERT <i>et al.</i> , "On the influence of the gas velocity on dissociation degree and gas temperature in a flowing microwave hydrogen discharge", <i>Journal of Applied Physics</i> , 84:1, pp. 161-167, July 1, 1999, American Institute of Physics	
		GORDON <i>et al.</i> , "Energy coupling efficiency of a hydrogen microwave plasma reactor" <i>Journal of Applied Physics</i> , 89:3, pp. 1544-1548, February 1, 2001, American Institute of Physics	
		BADOVANOV <i>et al.</i> , "Time-resolved Balmer-alpha emission from fast hydrogen atoms in low pressure radio-frequency discharges in hydrogen", <i>Appl. Phys. Lett.</i> , 66:20, pp. 2637-2639, May 15, 1995	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6566, December 1, 1993, American Institute of Physics	
		KONJEVIC, "Plasma Broadening and Shifting of Non-Hydrogenic Spectral Lines: Present Status and Applications", <i>Physics Reports</i> , 315, pp. 339-401, 1999, Elsevier	
		BENESCH <i>et al.</i> , "Line shapes of atomic hydrogen in hollow-cathode discharges", <i>Optics Letters</i> , 9:8, pp. 338-340, August 1984, Optical Society of America	
		AYERS, <i>et al.</i> , "Shapes of atomic hydrogen lines produced at a cathode surface", <i>Physical Review A</i> , 37:1, pp. 194-200, January 1, 1988, The American Physical Society	
		ADAMOV, <i>et al.</i> , "Doppler Spectroscopy of Hydrogen and Deuterium Balmer Alpha Line in an Abnormal Glow Discharge", <i>IEEE Transactions on Plasma Science</i> , 31:3, pp. 444-454, June 3, 2003	
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		JOVICEVIC <i>et al.</i> , "Excessive Balmer line broadcasting in microwave-induced discharges", <i>Journal of Applied Physics</i> , 95:1, pp. 24-29, January 1, 2004, American Institute of Physics	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6568-6565, December 1, 1993, American Institute of Physics	
		MAYO, "Thermalization and Energy Distribution in Cold Laboratory Plasmas Comments on the Possibility of Mono-Energetic Species", April 20, 2004	
		VIDENOVIC <i>et al.</i> , "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge", <i>Spectrochimica Acta Part B</i> , 51, pp. 1707-1731, 1996	
		BARBEAU <i>et al.</i> , "Spectroscopic investigation of energetic atoms in a DC hydrogen flow discharge, pp. 1168-1174, 1990 IOP Publishing Ltd.	
		KONJEVIC <i>et al.</i> , "Emission Spectroscopy of the Cathode Fall Region of an Analytical Glow", <i>J. Phys. IV France</i> , 7, pp. C4-247-C4-258, October 1997	
		LIFSHITZ <i>et al.</i> , "Resonance absorption measurements of atom concentrations in reacting gas mixtures. I. Shapes of H and D Lyman- $\alpha$ lines from microwave sources", <i>J. Chem. Phys.</i> , 70:12, pp. 5607-5613, June 15, 1979, American Institute of Physics	
		KURAICA <i>et al.</i> , "Line shapes of atomic hydrogen in a plane-cathode abnormal glow discharge", <i>Physical Review A</i> , 46:7, pp. 4429-4432, October 1, 1992, The American Physical Society	
		KURAICA <i>et al.</i> , "On the Atomic Hydrogen Line Shapes in a Plane-Cathode Obstructed Glow Discharge", <i>Physica Scripta</i> , 50, pp. 487-492, 1994	

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		OLTHOFF <i>et al.</i> , "Studies of Ion Kinetic-Energy Distributions in the Gaseous Electronics Conference RF Reference Cell", <i>Journal of Research of the National Institute of Standards and Technology</i> , 100:4, pp. 383-400, July-August 1995	
		RADOVANOV <i>et al.</i> , "Ion kinetic-energy distributions and Balmer-alpha ( $H_\alpha$ ) excitation in Ar- $H_2$ radio-frequency discharges", <i>J. Appl. Phys.</i> , 78:2, pp. 746-756, July 15, 1995	
		DJUROVIC <i>et al.</i> , "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics	
		ALEXEFF <i>et al.</i> , "Collisionless Ion-Wave Propagation and the Determination of the Compressions Coefficient of Plasma Electrons", <i>Physical Review Letters</i> , 15:7, pp. 286-288, August 16, 1999	
		ARATA <i>et al.</i> , "Reproducible 'Cold' Fusion Reaction Using a Complex Cathode", <i>Fusion Technology</i> , 22, pp. 287-296, September 1992	
		BURKHOLDER <i>et al.</i> , "Reactions of boron atoms with molecular oxygen. Infrared spectra of BO, BO <sub>2</sub> , B <sub>2</sub> O <sub>2</sub> , B <sub>2</sub> O <sub>3</sub> , and BO <sub>2</sub> in solid argon", <i>J. Chem. Phys.</i> , 95:12, pp. 8697-8709, December 15, 1991	
		SPURGIN, "Direct Conversion of the Random Thermal Energy of a Plasma Into Electrical Energy", Master's Thesis, The University of South Florida, June 1972	

Examiner Signature	<i>Avery Tsang Foster</i>	Date Considered	8/28/2005
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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/009,455		
		Filing Date	01/20/1998		
		First Named Inventor	Mills		
		Group Art Unit	1754		
		Examiner Name	Tsang		
Sheet	10	of	12	Attorney Docket Number	9113-20US

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		D. Luggenholcher, U. Czarnetzki, and H. P. Dobe Institut für Laser- und Plasmaphysik, Universität Essen, Germany, "Investigations on Electric Field Distributions in a Microwave Discharge in Hydrogen"	
		Technology Insights, "Hydro Catalysis Technical Assessment," (Part of 09/009,837 paper no.: 20050207) This document was submitted by R. Mills on 7/17/02 in copending application 09/669,877).	
		Evans Analytical Group, <a href="http://www.cea.com/inst.htm#esca2">http://www.cea.com/inst.htm#esca2</a> , "Time-of-Flight Secondary Ion Mass Spectrometry" (TOF-SIMS)	
		J M Luque, M D Calzada and M Saez, "Experimental research into the influence of ion dynamics when measuring the electron density from the Stark broadening of the H $\alpha$ and H $\beta$ lines."	
		Eng-Kie Souw, "Plasma Density Measurement in an Imperfect Microwave Cavity", J. Appl. Phys. 61, 1781, 1987.	
		John R. Shook, "A Pragmatically Realistic Philosophy of Science", < <a href="http://www.pragmatism.org/shook/pragmatic_and_Realistic.htm">http://www.pragmatism.org/shook/pragmatic_and_Realistic.htm</a> >	
		Raoul Nakhmanson, "The Ghostly Solution of the Quantum Paradoxes and it's Experimental Verification", from "Frontiers of Fundamental Physics", Bartone & Selleri, Plenum Press, NY 1994, < <a href="http://arxiv.org/ftp/physics/papers/0103/0103006.pdf">http://arxiv.org/ftp/physics/papers/0103/0103006.pdf</a> >	
		Donald A. McQuarrie, "Quantum Chemistry", University Science Books, CA, 1983, relevant parts of Chapters 4, 6, and 8.	

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		E. Kovacevic, I. Stefanovic, J. Berndt, and J. Winter, "The Dynamic Response of the Plasma on the Dust Formation in Ar/C <sup>2</sup> H <sup>2</sup> Rf Discharges." < <a href="http://www.repig.uni-greifswald.de/proceedings/data/kovacevic-1">http://www.repig.uni-greifswald.de/proceedings/data/kovacevic-1</a> >	
		N. Cvetanovic, m.M. Kuraica, N. Konjevic, "Excessive Balmer Line Broadening in a Plane Cathode Abnormal Glow Discharge in Hydrogen", J. Appl. Phys. 97, 033302 (2005)	
		E. U. Condon, Ph. D., G. H. Shortley, Ph. D., "The Theory of Atomic Spectra.", Cambridge, 1967, pp.45-69, and 112-147.	
		Ben Best, "The Copenhagen Interpretation of Quantum Mechanics", < <a href="http://www.benbest.com/science/quantum.html">http://www.benbest.com/science/quantum.html</a> >	
		Aaron J. Barth, "Bigger Than Fire?", SKEPTIC Vol. 8, No. 4, 2001.	
		Notes on David Peat, "Einstein's Moon: Bell's Theorem and the Curious Quest for Quantum Reality" History and Philosophy of Science-Fall, 1997 Dr. Ess, < <a href="http://www.drux.edu/ess/philsci/bell.html">www.drux.edu/ess/philsci/bell.html</a> >	
		Physics 200-04 Course, "Pauli Spin Matrices", < <a href="http://axion.physics.ubc.ca/200-04/paulispin.pdf">http://axion.physics.ubc.ca/200-04/paulispin.pdf</a> >.	
		"The Linear Stark Effect", University of Texas Lecture, < <a href="http://farside.ph.utexas.edu/teaching/qm/perturbation/node8.html">http://farside.ph.utexas.edu/teaching/qm/perturbation/node8.html</a> >	
		R.L. Ross, "Kantian Quantum Mechanics", < <a href="http://www.fresian.com/space-2.htm">http://www.fresian.com/space-2.htm</a> >	

Examiner Signature	<i>Amy Leary Ivata</i>	Date Considered	8/28/2005
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		Quantum Physics 361, "Paradoxes and Interpretation", < <a href="http://www.teach.phy.bris.ac.uk/Level30100/CourseMaterials/paradoxes.pdf">http://www.teach.phy.bris.ac.uk/Level30100/CourseMaterials/paradoxes.pdf</a> >	
		The Internet Encyclopedia of Philosophy, "Logical Positivism", < <a href="http://iep.utm.edu/logpos.htm">http://iep.utm.edu/logpos.htm</a> >	
		H. G. Kuhn, F. R. S., "Atomic Spectra", Longmans, Green & Co., Ltd., London/Harlow 1969 (2 <sup>nd</sup> ed.).	
		Anthony J. Marchese, Ph. D., Peter Jansson, Ph. D., P.E., John I. Schmalzel, Ph. D., R.E., "The Blacklight Rocket Engine", NIAC Phase 1 Final Report (May 1-November 30, 2002), <a href="http://www.niac.usra.edu/files/studies/final_report/">www.niac.usra.edu/files/studies/final_report/</a>	
		"Average Molecular Kinetic Energy" < <a href="http://hyperphysics.phy-astr.gsu.edu/hbase/kinetic/molke.html">http://hyperphysics.phy-astr.gsu.edu/hbase/kinetic/molke.html</a> >	
		"Attempt to Observe Excess Heat in a Ni-H <sub>2</sub> O-K <sub>2</sub> CO <sub>3</sub> Electrolysis System-9OCT97", <a href="http://www.earthtech.org/experiments/Mills/mills1.html">www.earthtech.org/experiments/Mills/mills1.html</a> .	
		Eric Krieg, "Hydrinos: A State Below the Ground State" <a href="http://www.freeenergies.org/bl/bwt/z/hydrino/hydrino.htm">http://www.freeenergies.org/bl/bwt/z/hydrino/hydrino.htm</a>	
		Peter D. Zimmerman, "An Analysis of Theoretical Flaws in So-Called Classical Quantum Mechanics and of Experimental Evidence Against CQM" (2001)	
		Rathke "A Critical Analysis of the Hydrino Model", New Journal of Physics, 19 May 2005, <a href="http://www.iop.org/ej/article/1367-2630/7/1/127/njp5_1_127.html">http://www.iop.org/ej/article/1367-2630/7/1/127/njp5_1_127.html</a>	
		Mills, R., "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States," (web publication June 9, 2004 at <a href="http://www.blacklightpower.com">www.blacklightpower.com</a> )	

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